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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,864	12/21/2001	Sridhar Ranganathan	KCC-16,282	4026

35844 7590 02/20/2004

PAULEY PETERSEN KINNE & ERICKSON
2800 WEST HIGGINS ROAD
SUITE 365
HOFFMAN ESTATES, IL 60195

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No.		Applicant(s)	
	10/036,864		RANGANATHAN ET AL.	
	Examiner		Art Unit	
	Elizabeth M Cole		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29, 31-63 and 65-88 is/are rejected.
- 7) ☒ Claim(s) 30 and 64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 31 and 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 31 and 65 depend from claims 30 and 64 respectively. Claims 30 and 64 each recite the absorbent composite web comprises about 2 weight percent thermoplastic binder fiber and about 98 weight percent particles of coated superabsorbent. However, claims 31 and 65 recite "above 85 weight percent coated superabsorbent". Since claims 31 and 65 contain all the limitations of claims 30 and 65, they are indefinite because they are broader than the claim from which they depend.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 12-25, 29, 31-34, 77-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al, U.S. Patent No. 3,901,236 in view of Dodge, II et al, U.S. Patent No. 5,994,615 and Cook, U.S. Patent No. 6,562,743. Assarsson et al discloses a superabsorbent particle which is coated with a cellulosic material such as cellulosic fiber. See col. 3, line 41- col. 4, line 46. The superabsorbents may be incorporated into airlaid absorbent pads. See col. 7, lines 21-50. The individual particles may comprise up to about 80% which meets the claimed limitations regarding the percent of superabsorbent to cellulosic fibers. See Col. 10, lines 17-26. With regard to limitations regarding the absorbent capacity of the composite absorbent web,

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although Assarsson et al does not disclose the claimed values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the absorbency capacity of the web through the process of routine experimentation by optimizing factors such as the amount and placement of the superabsorbent particles, the choice of the other components of the absorbent pad, etc. Assarsson et al differs from the claimed invention because Assarsson et al does not disclose the claimed density and does not disclose the presence of binders such as binder fibers in the airlaid pads. Dodge teaches at col. 12, lines 5-25 and col. 13, lines 9-16, that suitable absorbent materials, including airlaid webs, may include up to about 10 percent of a binder component based on the weight of the web. Dodge teaches that the binder component may comprise a thermoplastic polymeric fiber such as a polyolefin fiber or a bi-component fiber such as a polyethylene/polyethylene terephthalate fiber. See col. 16, lines 10-22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the particularly taught density and binders of Dodge in the airlaid web of Assarsson et al. One of ordinary skill in the art would have been motivated to employ the particularly taught density and binders of Dodge by the expectation that these would enhance the absorbency and strength of the Assarsson absorbent web since Dodge teaches that webs comprising these components are particularly strong and have improved fluid handling properties. Neither Assarsson nor Dodge teach employing about 75 to about 98 percent by weight superabsorbent. Cook teaches absorbent composites which may comprise about 80 percent by weight superabsorbent. See 8, lines 23-40. Cook

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teaches that high levels of superabsorbent are desirable because the superabsorbents are much more absorbent than the pulp material in the absorbent composite.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated high amounts of superabsorbents in the absorbent composite of Dodge as taught by Cook. One of ordinary skill in the art would have been motivated to employ high amounts of superabsorbents into the absorbent composite of Dodge by the expectation that this would enhance the absorbency of the composite.

4. Claims 35-42, 46, 52-59, 63, 65-68, 83-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al, U.S. Patent No. 3,901,236 Dodge, II et al, U.S. Patent No. 5,994,615. Assarsson et al discloses a superabsorbent particle which is coated with a cellulosic material such as cellulosic fiber. See col. 3, line 41- col. 4, line 46. The superabsorbents may be incorporated into airlaid absorbent pads. See col. 7, lines 21-50. The individual particles may comprise up to about 80% which meets the claimed limitations regarding the percent of superabsorbent to cellulosic fibers. See Col. 10, lines 17-26. With regard to limitations regarding the absorbent capacity of the composite absorbent web, although Assarsson et al does not disclose the claimed values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the absorbency capacity of the web through the process of routine experimentation by optimizing factors such as the amount and placement of the superabsorbent particles, the choice of the other components of the absorbent pad, etc. Assarsson et al differs from the claimed invention because

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Assarsson et al does not disclose the claimed density and does not disclose the presence of binders such as binder fibers in the airlaid pads. Dodge teaches at col. 12, lines 5-25 and col. 13, lines 9-16, that suitable absorbent materials, including airlaid webs, may include up to about 10 percent of a binder component based on the weight of the web. Dodge teaches that the binder component may comprise a thermoplastic polymeric fiber such as a polyolefin fiber or a bi-component fiber such as a polyethylene/polyethylene terephthalate fiber. See col. 16, lines 10-22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the particularly taught density and binders of Dodge in the airlaid web of Assarsson et al. One of ordinary skill in the art would have been motivated to employ the particularly taught density and binders of Dodge by the expectation that these would enhance the absorbency and strength of the Assarsson absorbent web since Dodge teaches that webs comprising these components are particularly strong and have improved fluid handling properties.

5. Claims 43-45, 60-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al in view of Dodge as applied to claims 35-42, 46, 52-59, 63, 65-68, 83-88 above, and further in view of Radwanski et al, U.S. Patent No. 4,939,016.

Neither Assarsson nor Dodge teaches incorporating elastomeric fibers or meltblown fibers into the airlaid absorbent webs or employing additional layers with the airlaid layer. Radwanski et al teaches that meltblown elastomeric fibers may be incorporated into airlaid webs in order to enhance the aesthetic properties of the web by producing a more cloth-like product. See col. 5, lines 9-27 and col. 6, lines 1-27, col. 7, lines 3-57.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated elastomeric meltblown fibers into the absorbent web of Assarsson, motivated by the expectation that this would enhance the aesthetic properties of the web. Radwanski further teaches that additional layers may be added to the web, such as col. 8, line 51 – col. 1-, line 26, in order to enhance and/or additional properties to the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included additional layers such as those taught by Radwanski into the material of Assarsson, motivated by the expectation that additional properties could be added to or enhanced by the additional layers.

6. Claims 9-11, 26-28, and 70-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al in view of Dodge and Cook as applied to claims 1-8, 12-25 29, 31-34, 77-82 above, and further in view of Radwanski et al, U.S. Patent No. 4,939,016.

Assarsson, Dodge and Cooke do not teach incorporating elastomeric fibers or meltblown fibers into the airlaid absorbent webs or employing additional layers with the airlaid layer. Radwanski et al teaches that meltblown elastomeric fibers may be incorporated into airlaid webs in order to enhance the aesthetic properties of the web by producing a more cloth-like product. See col. 5, lines 9-27 and col. 6, lines 1-27, col. 7, lines 3-57. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated elastomeric meltblown fibers into the absorbent web of Assarsson, motivated by the expectation that this would enhance the aesthetic properties of the web. Radwanski further teaches that additional layers may

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be added to the web, such as col. 8, line 51 – col. 1-, line 26, in order to enhance and/or additional properties to the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included additional layers such as those taught by Radwanski into the material of Assarsson, motivated by the expectation that additional properties could be added to or enhanced by the additional layers.

7. Claims 30, 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant's arguments filed 11/17/03 have been fully considered but they are not persuasive.

With regard to independent claims 35 and 52 and those claims dependent upon them, Applicant argues that the combination of Assarsson and Dodge do not teach an absorbent web consisting essentially of binder fibers and superabsorbent fibers. However, the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. In re Herz, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original). For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ("PPG could have defined the

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scope of the phrase consisting essentially of' for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention."). See also *In re Janakirama-Rao*, 317 F.2d 951, 954, 137 USPQ 893, 895-96 (CCPA 1963). If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In *re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). In the instant case, applicant bears the burden of showing any extra materials in Dodge, Cook or Assarsson would materially change the characteristics of applicant's invention and of showing where in the specification it is made clear what is regarded as constituting a material change in the basic and novel characteristics of the invention. Therefore, this ground of rejection has been maintained.

Applicant argues that the examiner is using an improper obvious to try standard with regard to the claimed properties of absorbent capacity, web integrity and edge stiffness. However, since Assarsson teaches the same particles, and Dodge and Cook teach incorporating the particles into absorbent composites, it is reasonable to presume that the composites would either have the same properties due to the use of the same materials, or in the alternative, that the properties of absorbency, flexibility and strength could have been optimized through the process of routine experimentation. Thus, the flexibility and strength of an absorbent composite would necessarily be related to the amount and type of bonding used. The absorbency would be related to the amount,

type, distribution of the absorbent materials used. Through the process of routine experimentation, these result effective variables would have been selected so as to optimize the desired properties in the absorbent composite.

With regard to arguments regarding the amount of superabsorbent in Dodge, this argument is moot in view of the new grounds of rejection.

With regard to the argument that the combination of Radwanski and Assarsson is untenable because Radwanski employs hydroentangling, the rejection does not require incorporating superabsorbents into Radwanski but rather states that incorporating the elastomeric fibers of Radwanski into the material of Dodge would have been obvious in order to enhance the "aesthetics" of the absorbent material. The word "aesthetics" is defined as "a pleasing appearance or effect". Radwanski discloses that incorporating the elastomeric fibers makes airlaid webs more like cloth. Thus, the incorporation of the elastomeric fibers would enhance the aesthetics of the absorbent material of Dodge by making the composite more cloth-like, which would be particularly desirable in an article which was going to be worn in proximity to the body.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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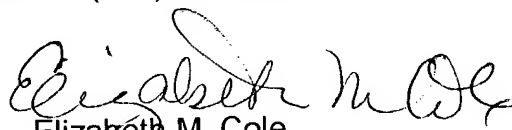
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (703) 872-9306.


Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c